

AMERICAN SOCIETY FOR TESTING MATERIALS.

AFFILIATED WITH THE
INTERNATIONAL ASSOCIATION FOR TESTING MATERIALS.

INDEX TO PROCEEDINGS

VOLUMES I - XII.

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EXPLANATORY NOTES.

The Index covers the contents of Volumes I to XII, inclusive, of the Proceedings completely, exclusive only of routine business. Volume I contains the twenty-eight Bulletins issued at irregular intervals from 1898 to 1902. From 1902 to date (1913) the Proceedings have been published in the form of annual volumes. The contents of the individual volumes appear in the Table of Contents of Proceedings which follows the Index.

Titles of papers are distinguished by quotation marks. Committee reports and specifications are indexed under appropriate subjects in their titles.

The list of key words in the Subject Index is given separately at the beginning of the volume. This list, it is believed, will prove a convenience in determining the key word or key words under which the subject sought is likely to appear, before turning to the Subject Index itself. The key words are not restricted to the words in the titles, but the aim has been to further facilitate search for information on important subjects by directing attention, through the key words, to pertinent matter in the body of the text.

In the Author Index, references to committee reports appear under the names of the chairmen, vice-chairmen, and secretaries of the committees concerned.

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- Alloy steels. IV, 211 (1904).
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- Closing of blowholes in ingots. IX, 345 (1909).
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The Welding of Blowholes in Steel—Henry M. Howe.
Further Notes on the Annealing of Steel—William Campbell.
The Influence of Titanium on Segregation in Bessemer-Rail Steel—G. B. Waterhouse.
Low-Carbon Streaks in Open-Hearth Rails—M. H. Wickhorst.
Elongation and Ductility Tests of Rail Sections under the Manufacturers' Standard Drop-Testing Machine—P. H. Dudley.
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The Effect of Sodium Silicate Mixed with or Applied to Concrete—Albert Moyer.
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An Investigation of the Distribution of Stress in Reinforced Concrete Beams, including a Comparative Study of Plain Concrete in Tension and Compression—A. T. Goldbeck.
The Painting of Cement and Concrete Structures—Charles Macnichol.
Some Exposure Tests of Structural-Steel Coatings—C. M. Chapman.
Vermilion Paint for Railway Signals: Results of an Investigation—Robert Job.
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The Determination of Soluble Bitumen—Prévost Hubbard and C. S. Reeve.
Improved Instruments for the Physical Testing of Bituminous Materials—Herbert Abraham.
Necessary Reforms in Specifications for Petroleum Products—Albert Sommer.

- Fuel Investigations, United States Geological Survey: Progress During the Year Ending June 30, 1910—J. A. Holmes.
- The Forest Products Laboratory: Its Purpose and Work—McGarvey Cline.
- The Scleroscope—Albert F. Shore.
- Apparatus for the Microscopical Examination of Metals—Albert Sauveur.
- The 600,000-lb. Hydraulic Testing Machine of the University of Wisconsin and Its Calibration—H. F. Moore and M. O. Withey.
- Some Testing-Laboratory Accessories—J. M. Porter.
- Apparatus for Repeated Loads on Concrete Cylinders and a Typical Result—H. C. Berry.
- An Autographic Rubber-Testing Machine—Thorsten Y. Olsen.
- A New Machine for Testing Pitch—Thorsten Y. Olsen.
- The Classification of Fine Particles According to Size—G. W. Thompson.
- A Comparison of Magnetic Permeameters—Charles W. Burrows.
- The Exponential Law of Endurance Tests—O. H. Basquin.
- The Structural Materials Testing Laboratories, United States Geological Survey: Progress During the Year Ending June 30, 1910—Richard L. Humphrey.

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- Summary of the Proceedings of the Fourteenth Annual Meeting.
- The American Society for Testing Materials—Annual Address by the President, Henry M. Howe.
- Report of Committee A-1 on Standard Specifications for Steel.
- Progress Report by the American Members of International Sub-Committee Ia on the Introduction of International Specifications for Steel.
- Supplemental Report by the American Members of International Sub-Committee Ia on International Steel Specifications and on the Work of that Sub-Committee.
- Proposed Standard Specifications for Forged and Rolled, Forged, or Rolled Solid Steel Wheels for Engine Truck, Tender and Passenger, Subway and Elevated Railway Service.
- Proposed Standard Specifications for Forged and Rolled, Forged, or Rolled Solid Steel Wheels for Freight Car Service.
- Standard Specifications for Heat-Treated Carbon-Steel Axles, Shafts, and Similar Parts.
- Standard Specifications for Steel Reinforcement Bars.
- Report of Committee A-3 on Standard Specifications for Cast Iron and Finished Castings.
- Proposed Revised Standard Specifications for Locomotive Cylinders.
- Report of Committee A-4 on Heat Treatment of Iron and Steel.
- Practice Recommended for Annealing Miscellaneous Rolled and Forged Carbon-Steel Objects.
- Report of Committee A-5 on the Corrosion of Iron and Steel.
- Analysis of Results of Official Inspection of Fence-Wire Tests, Carnegie Technical Schools, Pittsburgh, Pa., November 30, 1910.

- Report of Committee A-6 on the Magnetic Testing of Iron and Steel.
Standard Magnetic Tests of Iron and Steel.
- Report of Committee A-7 on the Tempering and Testing of Steel Springs and Standard Specifications for Spring Steel.
Report of Sub-Committee on Tests.
- Report of Committee B-1 on Standard Specifications for Hard-Drawn Copper Wire.
- Report of Committee B-2 on Non-Ferrous Metals and Alloys.
Standard Specifications for Copper-Wire Bars, Cakes, Slabs, Billets, Ingots, and Ingot Bars.
Standard Specifications for Spelter.
Standard Specifications for Manganese-Bronze Ingots.
- Report of Committee C-3 on Standard Specifications for Paving and Building Brick.
- Report of Committee C-4 on Standard Specifications and Tests for Clay and Cement Sewer Pipes.
- Report of Committee D-1 on Preservative Coatings for Structural Materials.
Report of Sub-Committee B on Inspection of the Havre de Grace Bridge.
Report of Sub-Committee C on Paint Vehicles.
Report of Sub-Committee D on the Atlantic City Steel Paint Tests.
Report of Sub-Committee E on Linseed Oil.
Report of Sub-Committee F on the Definition of Terms used in Paint Specifications.
Report of Sub-Committee J on the Testing of White Paints.
- Report of Committee D-4 on Standard Tests for Road Materials.
Report of Sub-Committee on Distillation.
Provisional Method for the Determination of Soluble Bitumen.
Provisional Method for the Determination of the Penetration of Bitumen.
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- Report of Committee D-5 on Standard Specifications for Coal.
Report on the Fuel Investigations of the Bureau of Mines.
- Report of Committee D-8 on Waterproofing Materials.
- Report of Committee E-1 on Standard Methods of Testing.
Standard Methods for Transverse Tests of Metals.
- Life History of Network and Ferrite Grains in Carbon Steel—H. M. Howe.
- The Manufacture of Pure Irons in Open-Hearth Furnaces—A. S. Cushman.
- The Heat Treatment of an Acid and a Basic Open-Hearth Steel of Similar Composition—Henry Fay.
- A Study of the Heat Treatment of Some Low-Carbon Nickel Steels—Henry Fay and J. M. Bierer.
- The Heat Treatment of a Steel containing 3.15 per cent Nickel and 0.27 per cent Carbon—William Campbell and H. B. Allen.
- Some Causes of Failures in Metals—Henry Fay.

- New Types of Impact Testing Machines for Determining Fragility of Metals—
T. Y. Olsen.
- A New Type of Autographic Transverse Testing Machine for Research
Testing or Regular Foundry Practice—T. Y. Olsen.
- A New Method of Testing the Endurance of Case-Hardened Gears and
Pinions—J. S. Macgregor and Bradley Stoughton.
- Standard Tests for Drain Tile and Sewer Pipe—A. Marston.
- The Fritz Engineering Laboratory of Lehigh University—F. P. McKibben.

VOLUME XII.

NOTE.—The Proceedings for 1912 were limited to committee reports with a view of strengthening the American contribution to the Congress of the International Association which was held in New York during the same year. In addition to these committee reports, Volume XII contains the standard specifications of the Society for that year, which are ordinarily published in the Year-Book; certain specifications selected from various sources; the membership list, and miscellaneous information concerning the Society.

- Summary of Proceedings of the Fifteenth Annual Meeting.
- Annual Address by the Retiring President, Henry M. Howe.
- Report of Committee A-1 on Standard Specifications for Steel.
- Action on the Report of Committee A-1.
- Proposed Standard Specifications for Cold-rolled Steel Axles.
- Report of Committee A-2 on Standard Specifications for Wrought Iron.
- Action on the Report of Committee A-2.
- Report of Committee A-6 on the Magnetic Testing of Iron and Steel.
- Report of Committee B-1 on Standard Specifications for Copper Wire.
- Action on the Report of Committee B-1.
- Report of Committee C-1 on Standard Specifications for Cement.
- Final Report of Special Committee of the American Society of Civil Engineers, on Uniform Tests of Cement.
- Report of Committee C-6 on Standard Tests and Specifications for Drain Tile.
- Report of Committee D-4 on Standard Tests for Road Materials.
- Minority Report.
- Report of Committee D-6 on Standard Specifications for Coke.
- Report of Committee E-5 on Regulations Governing the Form but not the Substance of Specifications.

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